PM 641

SYNTHETIC SMOKING MATERIAL AND METHOD FOR ITS PREPARATION

Abstract of the Disclosure

An improved smoking material is provided by the incorporation in cellulosic material of specific alkaline earth or aluminum salts in combination with certain other materials. A process is also provided for the formation of a synthetic smoking material by incorporating certain alkaline earth metals or aluminum salts in alpha-cellulose or a similar material. While the alpha-cellulose or similar material may be in sheet or particulate form or the like, the process preferably comprises forming an aqueous slurry of the cellulosic material, preferably in the form of loose and slightly beaten cellulose fibers in water, then adding the salts to the slurry, casting the same and thereafter drying, conditioning and slitting or cutting the resulting sheet to produce a low tar filler material. A preferred embodiment of the invention resides in foaming the slurry prior to casting the same to form an expanded product. One aspect of the invention resides in the discovery that the use of from 5 to 40% by weight (based on the cellulose) and preferably from 10-30% by weight (based on the cellulose) of the calcium, magnesium, iron or aluminum water-soluble salts of certain organic or inorganic acids in a cellulosic synthetic smoking material imparts to the same burning characteristics and subjective character which make the product desirable for incorporation in smoking products, particularly where these salts are in combination with the materials set forth later in this specification.

1005116029

While the cellulose, either in sheet or particulate form, may simply be impregnated with the alkaline earth or aluminum water-soluble salts of the organic and/or inorganic acids which are employed in accordance with this invention, their impregnation in the cellulose may be followed by: (1) using carbon dioxide and/or an acid capable of producing a water-insoluble salt by reaction with the water-soluble salts, (2) treatment with ammonium and/or alkali metal salts of various acids capable of precipitating the alkaline earth or aluminum metal or metals present in the water-soluble salts or (3) treatment with hydroxides, such as KOH, NaOH, LiOH or with NH_4OH.

Alternatively, the water-soluble alkaline earth or aluminum salts may be added to the cellulose after a pretreatment with either: (1) ammonium hydroxide and/or an alkali hydroxide, (2) ammonium and/or alkali metal salts of various acids capable of precipitating the alkaline earth or aluminum metals to be subsequently added to the cellulose or (3) acids which form water-insoluble salts of the alkaline earth or aluminum ions in the water-soluble salts to be subsequently added to the cellulose.